DERWENT-ACC-NO: 1999-085809

DERWENT-WEEK: 199911

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TITLE: Silicon radder (sic) type photopolymer composite,

and process for

patterning - for passivation layer for semiconductor appts.

PATENT-ASSIGNEE: MITSUBISHI ELECTRIC CORP[MITQ]

PRIORITY-DATA: 1997JP-0133602 (May 23, 1997)

PATENT-FAMILY:

LANGUAGE PUB-NO PUB-DATE

PAGES MAIN-IPC

December 4, 1998 N/A JP 10319597 A

G03F 007/075 018

APPLICATION-DATA:

PUB-NO APPL-DESCRIPTOR APPL-NO

APPL-DATE

JP10319597A 1997JP-0133602 N/A

May 23, 1997

INT-CL (IPC): C08F002/48; C08F290/14; C08L083/04;

G03F007/004;

G03F007/028; G03F007/075; H01L021/312

ABSTRACTED-PUB-NO: JP10319597A

BASIC-ABSTRACT: Claimed silicon radder type photopolymer

composite comprises a

silicon radder resin of the formula (1), and a

photocrosslinking agent or a photopolymerisation initiator.

Formula (1)-p

R1, R2 = H, aryl, alkyl, unsaturated group;

R3, R4, R5, R6 = H, aryl, alkyl, trialkylsilyl; unsaturated

group; at least 1

wt.% of the total of R1 - R6 is a light-sensitive group; n = integer).

Also claimed is the patterning process comprising (a)

forming the layer of the composite on a base plate, (b) heating the composite layer at a temperature at least 5 deg. C lower than the m.pt. of any of the component, (c) exposing the layer through a photomask and (d) developing the exposed layer.

Further claimed is the semiconductor apparatus comprising a base plate and the photopolymer layer.

USE - The composite is used for providing the passivation layer for semiconductor apparatus.

ADVANTAGE - The passivation layer has good stability, and is formed by a rapid and simple patterning process.

CHOSEN-DRAWING: Dwg.0/1

TITLE-TERMS:

SILICON TYPE PHOTOPOLYMERISE COMPOSITE PROCESS PATTERN PASSIVATION LAYER SEMICONDUCTOR APPARATUS

DERWENT-CLASS: A26 A89 G06 L03 P84 U11

CPI-CODES: A06-A00E4; A08-C01; A08-D01; A11-C02B; A12-E07C; A12-L02B2; G06-E02; G06-F03C; G06-G17; G06-G18; L04-C06;

EPI-CODES: U11-C05A; U11-C20;

ENHANCED-POLYMER-INDEXING:

Polymer Index [1.1]

018 ; D11 D10 D12 D18*R D51*R F81 F83 F86 F87 ; P1445*R F81 Si 4A

; L9999 L2391 ; L9999 L2073 ; M9999 M2073 ; S9999 S1627 S1605 ;

H0179 ; H0282

Polymer Index [1.2]

018 ; ND01 ; ND04 ; B9999 B4988*R B4977 B4740 ; K9847*R K9790 ;

K9869 K9847 K9790 ; B9999 B5243*R B4740 ; B9999 B5094 B4977 B4740

; B9999 B3532 B3372 ; Q9999 Q8673*R Q8606 ; Q9999 Q7476

Q7330 ;
 N9999 N7147 N7034 N7023 ; Q9999 Q7170 Q7158 Q7114 ;
K9585 K9483
Folymer Index [1.3]
 018 ; D01 D11 D10 D07 D25 D22 D33 D79 D43 D50 D93 F23 ;
D01 D11
 D10 D19 D18 D23 D22 D32 D76 D41 D93 F23 F00 ; A999 A179
A157
Polymer Index [1.4]
 018 ; D01 ; R01056 G2595 D01 D11 D10 D50 D63 D86 F41
F89 ; A999
 A475

SECONDARY-ACC-NO:

CPI Secondary Accession Numbers: C1999-025938 Non-CPI Secondary Accession Numbers: N1999-062203

11/21/2002, EAST Version: 1.03.0002

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